Firstly, simply combining Zampighi's and Greene's teachings about naturally occurring clathrin to create a viable quantum computer element is not feasible and is effectively unworkable, for all the various reasons listed above. Similarly, neither Zampighi nor Greene teach how to create a bio-engineered clathrin system capable of quantum information processing as is expressed in the instant application specification and as reflected in the amended claims.

Secondly, a simple search will show there are many USPTO issued patents that include or utilize well-known bio-material compositions, like liposomes and capsids as the basic feature of the invention. In all these cases, "It would have been obvious for someone or ordinary skill in the art at the time..." to combine various liposome, and capsid teachings to create the materials used in the liposome-related and capsid patents (and there are many more such) inventions listed in the below, which are also listed on a separate document and incorporated as reference:

**7,112,337,** Liposome composition for delivery of nucleic acid, Huang, et al. September 26, 2006.

**7,108,863,** Liposome composition for improved intracellular delivery of a therapeutic agent, Zalipsky, et al. September 19, 2006.

**7,101,570,** Liposome compositions and methods for the treatment of atherosclerosis, Hope, et al. September 5, 2006.

**7,101,532,** Liposome containing hydrophobic iodine compound, Aikawa, et al. September 5, 2006

**7,037,520,** Reversible masking of liposomal complexes for targeted delivery, Smyth Templeton, May 2, 2006

**7,033,834,** Methods and means for targeted gene delivery (using viral capsids) Valerio, et al. April 25, 2006.

All the above patented inventions use well-known biomaterials, and their inventors also had knowledge of the teachings of others to create their inventions, as is obvious to anyone skilled in the art. But the use of well-understood bio-building blocks

did not negate the unique and individual utility of each of these inventions. Once again, USPTO precedence shows that novel utility outweighs any purported anticipation based on generic teachings. The instant invention is sui generis, which is expressed in the instant application specification and amended claims, which make repeated use of terms such as "man-made", "can be calculatedly expressed", and "non-naturally occurring" to express that this is a novel invention.

**D.** Per 35 U.S.C.103 (a), and 37 C.F.R. 1.56, and potential 35 U.S.C.102 (e), (f), or (g) prior art under 35 U.S.C. 103(a), re commonly owned claims, all claims in the instant patent are commonly owned by Franco Vitaliano and Gordana Vitaliano.

**E.** Re other Art, Journal Articles, etc., it should be noted that F. Vitaliano's article, "The Next Big Thing That Will Change Absolutely Everything," (2001) was a general information article that did not describe in any detail whatsoever the instant invention.

Re F. Vitaliano's "VXMaia: A New Quantum Computing System" (PowerPoint presentation, June 18, 2002), this was a closed-door, highly secure briefing to the DOD and was not intended for distribution or publication.

Re F. Vitaliano's "VXMaia: A New Quantum Computing System for Biotech" (PowerPoint presentation, October 23, 2002), this was a closed-door presentation done under NDA and was not intended for distribution or publication.

Lastly, F. Vitaliano's "ExQor: A New NBIC Platform" (PowerPoint presentation, September, 2003), was also closed-door presentation and was not intended for distribution or publication, and was done after filing of the instant patent on September 13, 2003.

All other listed documents have no specific bearing in any way on the instant application and are viewed as being background information, only, as they do not specifically teach how to create bio-engineered quantum computing elements and platforms using bio-engineered clathrin protein.

Date: October 13, 2006

Filed Pro Se

Franco Vitaliano

and

G Vitaliano

Gordana Vitaliano

Address:
4 Longfellow Place, # 2105
Boston MA 02114-2818 USA
Tel 617 742 4422
Fax 617 248 8886
e-mail: francov@exqor.com

**Incorporated As Reference, Re Section C.4. In Inventors' Response**

**7,112,330**, Method for producing yeast expressed HPV types 6 and 16 capsid proteins, Buonamassa, et al., September 26, 2006

**7,105,303**, Antibodies to hepatitis C virus asialoglycoproteins, Ralston, et al., September 12, 2006,

**7,094,409**, Antigen arrays for treatment of allergic eosinophilic diseases, Bachmann, et al., August 22, 2006

**RE39,229**, Binding proteins for recognition of DNA, Choo , et al., August 8, 2006

**7,060,291**, Modular targeted liposomal delivery system, Meers, et al., June 13, 2006

**7,063,860**, Application of lipid vehicles and use for drug delivery, Chancellor,et al., June 20, 2006

**7,048,949**, Membrane scaffold proteins, Sligar, et al. May 23, 2006.

**Incorporated As Reference, Re Section C.7. In Inventors' Response**

**7,112,337,** Liposome composition for delivery of nucleic acid, Huang, et al. September 26, 2006.

**7,108,863,** Liposome composition for improved intracellular delivery of a therapeutic agent, Zalipsky, et al. September 19, 2006.

**7,101,570,** Liposome compositions and methods for the treatment of atherosclerosis, Hope, et al. September 5, 2006.

**7,101,532,** Liposome containing hydrophobic iodine compound, Aikawa, et al. September 5, 2006

**7,037,520,** Reversible masking of liposomal complexes for targeted delivery, Smyth Templeton, May 2, 2006

**7,033,834,** Methods and means for targeted gene delivery (using viral capsids) Valerio, et al. April 25, 2006.